

## ABSTRACT

### EFFECTIVE NUCLEAR REPROGRAMMING IN MAMMALS

The present invention provides methods of producing a cloned non-human mammalian nuclear transfer (NT) embryo and methods for producing a cloned non-human mammal. Embodiments of the methods include introducing donor genetic material into a metaphase I oocyte; introducing donor genetic material into a non-enucleated oocyte; introducing donor genetic material obtained from a donor cell that is at metaphase into an oocyte; introducing donor genetic material into an oocyte, and naturally activating the oocyte or the NT embryo; and introducing donor genetic material obtained from a donor cell that is at late G1 phase into an oocyte.

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